PRESIDIO OF SAN FRANCISCO, FORT WINFIELD SCOTT, SWITCHBOARD ROOM NO. 3

HABS CA-2837

(Building 670) 670 Crissy Field Avenue Golden Gate National Recreation Area San Francisco San Francisco County California

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD National Park Service U.S. Department of the Interior 1111 Jackson St Oakland, CA 94607

HISTORIC AMERICAN BUILDINGS SURVEY

Presidio of San Francisco, Fort Winfield Scott, Switchboard Room No. 3 (Building 670)

HABS No. CA-2837

Location: South of Crissy Field Avenue and U.S. 101 (Doyle Drive), east of McDowell

> Avenue, and north of Patten Road and Lincoln Boulevard; situated approximately 240'upslope and northeast of Presidio Building No. 667 Presidio of San Francisco, Golden Gate National Recreation Area

San Francisco

San Francisco County

California

USGS San Francisco North Quadrangle, UTM Coordinates:

10/547063/4183975

Present Owner

And Occupant: Presidio Trust

Demolished in November 2009, subsequent to the completion of this report.

Significance: Building 670 is a contributor to the Presidio of San Francisco National Historic

> Landmark District. The building is listed in the most recently updated Registration Form (1993) for the Presidio of San Francisco National Historic Landmark District as "Building No. 670: Chemical Storehouse." The 1993 Registration Form dates the building's construction in 1921. However, the building's construction, original purpose, and historical significance are related to the Army's earlier efforts to modernize the artillery targeting—or "fire

control"—system of the San Francisco Harbor's coastal defenses. Built by 1909, Building 670 was one of three such telecommunications switchboard facilities operated by the Coast Artillery Corps stationed at Fort Winfield Scott. The Army's motivations for modernizing the coastal defenses of San Francisco Harbor included technological advances enabling greater artillery accuracy, the growing early-twentieth-century presence of Japanese naval power in the Pacific, and the development of the Panama Canal, which promised to increase the San Francisco Harbor's commercial importance as a hub of maritime shipping.

Building 670 is a primarily utilitarian building constructed to provide secure housing for telecommunications equipment and the military personnel who operated such equipment. It is representative of predominantly concrete buildings associated with the fire-control system developed to fortify the San Francisco

Harbor during the early twentieth century.

Part 1. Historical Information

A. Physical History:

1. Date of erection: 1909. Lieut. Col. John Biddle described Building 670 (initially known as Switchboard Room No. 3) as "completed as regards Engineer Department construction work" in his "Report of the Completed Batteries, Etc., Defenses of San Francisco, Cal.," which was dated December 31, 1909. The building was constructed to house telephonic communications equipment serving the Coastal Artillery Corps at Fort Winfield Scott. Building 670 was one of three switchboard rooms constructed at Fort Winfield Scott as part of the effort to modernize coastal-artillery fire control during the early twentieth century.

2. Architect: Not Known

3. Original and subsequent owners, occupants, uses:

a.) Owners: United States Army, 1909 to 1994; National Park Service, 1994 to 1998; Presidio Trust, 1998 to present.

b.) Occupants and uses:

1911-ca. 1940: U.S. Army Coastal Artillery Corps, Fort Winfield Scott,

Telecommunications and Switchboard facility

ca. 1940–ca. 1945: District Recruiting Officer, Main Post, Presidio of San Francisco, Storage Room

ca. 1949-ca. 1966: Occupant Unknown; Chemical Storage Facility

ca. 1973-ca. 1976: Occupant Unknown; Cable House

4. Builder, contractor, suppliers:

Builder: U.S. Army Corps of Engineers

Contractors and Suppliers: The building's telecommunication equipment and associated cable appear to have been installed and maintained by the Army Signal Corps from ca. 1911 to ca. 1940, and possibly later. Other potential contractors and suppliers are not known.

5. Original plans and construction: The earliest description found during the research conducted on this building occurs in an anonymous engineer's notebook dating to 1920, over a decade after the building's initial construction. The engineer described it as a "2-room concrete structure with [a] wood, tar and gravel roof." This description supports the likelihood that the building has retained its simple, rectangular, two-room plan, and its original roofing type, throughout its history. This conclusion is reinforced by the earliest view located during the research: Photo 30, of the "Viaduct, High, Presidio Approach" folder of the Bancroft Library's Golden Gate Bridge Construction Photo Collection. The northwest side and the southwest façade of Building 670 appear in the

¹ Anonymous, "Engineer's Notebook, Journal, Fire Control," ca. 1920, 4–5, Vertical Files—Places—S.F. Harbor Defenses, Golden Gate National Recreation Area Park Archives and Records Center (hereafter referred to as Golden Gate NRA Park Archives).

² Photo 30, Viaduct, High Presidio Approach, Construction Photographs of the Golden Gate Bridge, 1933-34. BANC PIC 1905.14281. The Bancroft Library, University of California, Berkeley, and On-Line Archive of California: http://www.oac.cdlib.org/ark:/13030/tf309nb3dc/?brand=oac4.

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upper right background of a photo of the Doyle Drive High Viaduct's construction during the mid-1930s. The image exhibits the building's basic dimensions, as well as the fenestration and entryway at the building's southwest façade. When magnified, the image conveys the cornice-like effect created by the building's eave, fascia, and Yankee gutters. The earliest building plans located during the research for this report date to 1949.³

6. Alterations and additions: Army property records indicate that the building was reroofed and received other unspecified repairs in 1956. The current building matches the 1920 description and 1940 plans referenced above (i.e. "5. Original plans and construction"). There are no apparent changes in materials or other evidence of alterations except the loss of some original switchboard equipment in the basement and built in features on the first floor.

B. Historical Context:

The construction of Building 670 was part of a larger effort initiated by the so-called Taft Board to maximize the power of early-twentieth-century artillery by modernizing the fire-control capability: the system of artillery command, observation, targeting, and firing which came to depend on integrated telephonic communications. Organized in 1905 and named for then Secretary of War, William Howard Taft, the Taft Board was empowered to assess the performance of the extant coastal artillery system, the development of which had been initiated decades earlier by the so-called Endicott Board (1883). Based on the Taft Board's recommendations, Secretary Taft approved a \$900,000 appropriation for improvements to coastal defenses in 1907. The War Department devoted \$770,000 of those funds to fire-control development at emplacements defending San Francisco Harbor.

Such investment in the coastal defenses of San Francisco doubtlessly reflected the importance of the city's Pacific harbor, which was certain to grow in commercial significance with the opening of the Panama Canal, then under construction and completed in 1914. The appropriations for San Francisco fire-control improvement also reflected government and military officials' increasing concern over the Pacific presence and growing naval strength of Japan, an industrializing nation that had recently confounded notions of European racial and cultural superiority with its victory in the

³ Department of Engineering, Presidio of San Francisco, Building No. 670, Fort Scott Switchboard No. 3, Traced March 15, 1940, Revised February 10, 1949, Presidio Department of Engineering Building Plans, GOGA 34300, Golden Gate NRA Archives.

⁴ Joe C. Freeman, Stephen A. Haller, David M. Hansen, John A. Martini, Karen J. Weitze, *Seacoast Fortifications Preservation Manual* (National Park Service and KEA Environmental, Golden Gate National Recreation Area, San Francisco, California, July 1999), 32-35; Erwin N. Thompson, *Historic Resource Study, Seacoast Fortifications, San Francisco Harbor, Golden Gate National Recreation Area, California* (Denver Service Center Historic Preservation Team, National Park Service, United States Department of the Interior, July1979), 221-223.

⁵ "Taft Approves Plan for Harbor," San Francisco Chronicle, July 15, 1907: 12.

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Russo-Japanese War, and that had developed tense relations with the United States.⁶

Building 670 was a product of communications improvements recommended by the Taft Board and funded by Taft's 1907 federal appropriations. Its construction was part of a plan to modernize San Francisco coastal defenses. This plan included the introduction of searchlights and construction of base-end observation stations and fire-control stations, the latter of which housed plotting equipment and commanding officers who directed the artillery operations of groups of two to four batteries. Central to this initiative was the implementation of an advanced system for maximizing artillery accuracy, a system which would not be surpassed until the advent of radar. This system was known as "horizontal triangle" or "indirect" target range determination. In contrast with the earlier "vertical triangle" system—which required one instrument (a depression position finder) housed in a single station to determine ranges—the horizontal system required multiple, separately located instruments and base end stations to calculate the position of moving targets. Enabling greater accuracy at longer ranges, the horizontal system also depended on reliable telecommunications for coordination of battle commands, mine commands, fire commands (housed in fire-control stations), base-end stations, and artillery gunners. Building 670 was part of the communications improvement necessary for implementation of the horizontal artillery aiming system.⁷

The Army may have begun erecting Building 670 (originally known as Switchboard Room No. 3) as early as 1907, and the building's basic construction was completed by 1909. Army engineers transferred the building to the Coast Artillery Corps in 1911. The building was one of three modestly sized switchboard facilities erected to house telecommunications equipment and personnel servicing operations of the Coast Artillery Corps' Fort Winfield Scott command. Concrete-walled with a wood, tar, and gravel roof, the completed building was subsequently estimated to have cost \$900.00. The Army Signal Corps ran telecommunications cable lines through the building's basement. Connecting to the building's switchboard facilities, these cables extended to the east (the

⁶ Events in Northern California contributed heavily to the increasingly tense relations between the United States and Japan. In 1906, for example, the San Francisco School Board ordered the segregation of Japanese students in the city, creating a major diplomatic incident for Theodore Roosevelt's presidential administration. On the issues discussed in this paragraph, see Arthur H. Dutton, "Defending the Pacific Coast: An Explanation for the Great Military and Naval Maneuvers in the West," *Overland Monthly and Out West Magazine*, 50 (September, 1907):6–14; Roger Daniels, *Prisoners Without Trial: Japanese Americans and World War II* (New York: Hill and Wang, 1993, 1998), 12–13; Walter La Feber, *The Cambridge History of American Foreign Relations, Volume II: The American Search for Opportunity, 1865–1913* (New York: Cambridge University Press, 1993, 1995), 189, 194–195, 200–209; Matthew Fry Jacobson, *Barbarian Virtues: The United States Encounters Foreign Peoples at Home and Abroad, 1876–1917* (New York: Hill and Wang, 2000), 83–85.

⁷ Freeman et al., Seacoast Fortifications Preservation Manual, Golden Gate National Recreation Area, 34–35; Bolling W. Smith, "Fire Control and Position Finding: Background," in Mark A Berhow, ed., American Seacoast Defenses, A Reference Guide (McLean, Virginia: CDSG Press, 2004), 257–259.

⁸ Lieut. Col. John Biddle, Report of Completed Batteries, Etc. Defenses of San Francisco, California, Corps of Engineers, U.S. Army. December 31, 1909, 18, Vertical Files—Places—S.F. Harbor Defenses, Golden Gate NRA Archives; Army Engineering Department, Map of Fort Scott and Presidio of San Francisco, 1918, Surveyed 1914, Drawer 311, Folder 2, National Park Service, Golden Gate NRA Archives.

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Main Post), the north (to the four batteries just north of the building, and across the San Francisco Bay to Fort Baker), and west to other switchboard facilities and batteries located nearer to Fort Winfield Scott. Building 670 was built on the reverse slope of a bluff overlooking the harbor from the south, 300' directly south of Battery Baldwin and its two 3" rapid-fire guns, the southernmost of a group of four emplacements that included (moving from west to east) Battery Sherwood and its two 5" guns, Battery Slaughter and its three 8" rifles mounted on disappearing carriages, and Battery Blaney and its four 3" rapid-fire guns. Also constructed by 1909, the fire-control station for these batteries (no longer extant) was located approximately 100' south of the western end of Battery Slaughter. These emplacements and supporting facilities—which also included a meteorological station and a tide station—were operated under the Ninth Fire Command of the Second Battle Command. The Second Battle Command incorporated Forts Winfield Scott, Baker, and McDowell.

Building 670 appears to have played a relatively short-lived role in fire-control operations at the Presidio's Fort Winfield Scott. The increasing power of artillery developed during the early years of World War I prompted Army officials to plan for future engagements that stood to take place on the outskirts of harbors and to involve larger artillery—weaponry that far surpassed the power of the guns at Batteries Baldwin, Sherwood, Slaughter, and Blaney. The Army disarmed batteries Slaughter and Sherwood in 1917. Building 670 may have provided communications-related fire-control service for Batteries Baldwin and Blaney around this time. In 1920 the Army disarmed the remaining nearby Batteries Blaney and Baldwin. ¹⁰

The building appears to have not been a high priority after 1920—at least, not in terms of the coastal defense system. Signal Corps records show that, in contrast to Switchboard Room Nos. 1 and 2, Switchboard Room No. 3 (Building 670) had no telephone and no working electric battery by the mid 1920s. A 1930 Signal Corps report stated that "Switchboard No. 3 is not heated and the wiring and strips are damp and mouldy [sic]." Still, the Signal Corps appears to have maintained the building's switchboard into the 1930s. ¹¹

⁹ Biddle, Report of Completed Batteries, Etc., 18; Anonymous, "Engineer's Notebook, Journal, Fire Control," ca. 1920, 4–5, Vertical Files—Places—S.F. Harbor Defenses, Golden Gate NRA Archives; *San Francisco Chronicle*, "Will Lay Fire Control Cables," July 21, 1909: 16; Thompson, *Historic Resource Study, Seacoast Fortifications, San Francisco Harbor*, 180, 190, 203–204; Building No. 670 Real Property Records, 1949–1956, Army Real Estate Records, GOGA 35338, Real Property Cards, National Park Service, Golden Gate NRA Archives; Map of San Francisco Harbor, Fort Winfield Scott, Eastern Portion Presidio, Batteries Slaughter, Sherwood, Baldwin and Blaney, Serial 124, Seacoast Fortifications Maps, GOGA 2261 F1, National Park Service, Golden Gate NRA Archives.

¹⁰ Thompson, *Historic Resource Study, Seacoast Fortifications, San Francisco Harbor*, 180, 190, 203–204, 286–287, 288; Construction Division, War Department, Washington D.C., Air Coast Defense Station, Presidio, San Francisco, California, Water & Electrical Layout, April 7, 1920, Drawer 311, Folder 3, National Park Service, Golden Gate NRA Archives.

¹¹ Signal Corps Form 211—Sheet 7, Fort Winfield Scott, California, April 19, 1925:2; Signal Corps Form 211—Sheet 19-D, List of Telephones, Fort Winfield Scott, California, April 18, 1925 and July 17, 1926; Signal Corps

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Building 670 was put to new uses by the beginning of the 1940s. A sheet of building plans dated 1940 indicates that, by then Building 670 was being used as a storeroom for the District Recruiting Officer at the Presidio's Main Post. A revised sheet of building plans dated February 1949 labeled the structure: "Building No. 670, Fort Scott Switch Board No. 3." It appears that the building was used for chemical storage by the end of 1949. In the "designation" field of an Army property record for the building dated October 1949, the words "Chemical Storehouse Ft. Scott Switchboard" are scribbled over and the phrase "Chemical Storage" is hand-written above. In 1956 the building was reroofed and received other repairs unspecified in Army property records for the years 1949–1956. The building maintained its designation as a chemical storage facility until at least 1966. Research has not revealed whether the U.S. Army department stored chemicals there, or the kinds of chemicals that might have been stored there. The building was re-designated as a cable house to store cables for communication lines in Army property records for the years 1973–1978. Building 670 has been vacant since 1992, and possibly earlier. Is

The most recent update of the *National Register of Historic Places Registration Form*, *Presidio of San Francisco National Historic Landmark District* (1993) lists Building 670 as "Building 670, Chemical Storehouse," and dates its construction at 1921. This inaccuracy appears to be based on primary-source documentation in the Army real estate records and on secondary studies of the Presidio of San Francisco. ¹⁴ The earliest map to identify Building 670 was based on a 1914 survey conducted by the Army Engineering Department. The map was not declassified until the early 1960s. ¹⁵

Form 211-Sheet 19-A, List of Telephones, Fort Winfield Scott, California, November 21, 1930; Signal Corps Form 204, Inspection of Fire Control Communication System, Fort Winfield Scott, California, December 23, 1930:7. All of these Signal Corps sources are from the Signal Corps Records, Presidio of San Francisco, Fort Scott, GOGA 35345 F3, National Park Service, Golden Gate NRA Archives.

¹² Building No. 174 [Building 670 / Switchboard Room No. 3] Plans, Main Post, Store Room (District Recruiting Officer), p. 3 of Building No. 670 Physical History Report Building Inventory, Presidio Trust Library, San Francisco, California; Building No. 670 Plans, Fort Scott Switch Board No. 3, 1949 Revision, Presidio Department of Engineering Plans, GOGA 35300, National Park Service, Golden Gate NRA Archives; Building No. 670 Real Property Records, 1949–1956, Army Real Estate Records, GOGA 35338, Real Property Cards, National Park Service, Golden Gate NRA Archives.

¹³ Building No. 670 Real Property Records, 1960, 1966, 1973–1978, Army Real Estate Records, GOGA 35338, Real Property Cards, National Park Service, Golden Gate NRA Archives; Building No. 670 Physical History Report Building Inventory, 2.

¹⁴ Paul Alley, Leo R. Barker, Gordon Chappel, Cary Feierabend, John P. Langellier, David Quitevis, and Sally A. Dean, *National Register of Historic Places Registration Form, Presidio of San Francisco National Historic Landmark District*, October 1993:7–168; Building 670 Real Property Cards, GOGA 35338, Army Real Estate Records, 1949–1946, 1966, 1960, National Park Service, Golden Gate NRA Archives; Erwin N. Thompson, *Defender of the Gate, the Presidio of San Francisco: A History from 1846 to 1995, Vol. II* (San Francisco: Golden Gate National Recreation Area, California, National Park Service, 1997), 633–634.

¹⁵ Army Engineering Department, Map of Fort Scott and Presidio of San Francisco, 1918, Surveyed 1914. Drawer 311, Folder 2, Golden Gate NRA Archives.

Part 2. Architectural Information

A. General Statement:

1. Architectural character: Building 670 is a rectangular, single-story, simple-plan building with a basement. The basement is accessed by steep wood steps through a hatch door in the wood floor. The joists supporting the first floor are exposed as the ceiling of the basement. The basement floor is concrete but dirt covers it to a depth of several inches throughout and the height from floor to ceiling is approximately 6'. The building's plan and construction materials (particularly its concrete walls) are representative of the types of buildings built to function as switchboard rooms and fire-control stations at Fort Winfield Scott during the so-called Taft era of artillery fire-control development. It appears that the building has never received major structural alterations or additions.

Stout concrete walls, few and small 2-over-2-light, double-hung sash windows, galvanized steel bars over the windows, a heavy sliding steel door, and small overall massing distinguish this utilitarian building from common storage buildings at the Presidio and give it a specialized and fortified appearance.

2. Condition of fabric: The current condition of Building 670 is very poor. The walls and window frames, as well as the sliding door and other steel features, remain intact. However, major portions of the gutters and eaves have collapsed. The building's roof has largely collapsed where branches from large Monterey pines have crashed through, causing the rot and collapse of much of the wood floor in the main room on the first floor. The basement collects water from precipitation. Little glass is left in the window panes, and graffiti covers much of the exterior walls.

B. Description of Exterior:

- **1. Overall dimensions**: Building 670's dimensions are 26'-6" x 16'-4"in plan. The building is a single-story, rectangular structure with a low basement.
- **2. Foundations**: The basement walls are approximately 3' thick of poured, board-formed concrete at grade, forming a skirt of concrete that flairs out and is covered in dirt. The first-floor walls of board-formed, poured concrete are 8" thick. The top of the basement walls flare with a simple 45-degree angle into the thicker foundation walls, lending definition to the division of basement and first floor levels around the perimeter. The 3' wide poured skirt is not visible without excavation. Below the skirt the basement walls may continue down at a 10" width. Near the top of the northwest and southeast foundation walls are four vents above grade. This small fenestration is unglazed but is secured with vertical bars.
- **3.** Walls: Exterior walls are 8" thick, board-formed concrete and rise 9' from the top of the partially exposed foundation walls to the cornice. The exterior wall surface consists of

rough-finished concrete with visible imprints from the original forms. Modern graffiti covers much of the exterior wall surface. The transition from the exposed tops of the foundation walls to the 9' exterior walls forms a belt course.

- **4. Structural system, framing**: The building is a reinforced concrete structure with a wood framed roof. The floor of the smaller room at the northwest end of the building is concrete. The floor in the larger room consists of joist-supported tongue-and-groove flooring. The basement floor is concrete slab.
- **5. Porches, stoops, balconies, bulkheads**: Two sets of rectangular fan steps, each with three steps, lead to the building's entry. One set descends into a shallow dry moat surrounding the building, and one set ascends from the shallow moat to the building's entry.
- **6. Chimneys**: Remnants of two symmetrically positioned, circular tin chimney flues are located at opposite sides of the building's northwest end. These open into the building's smaller, secondary room.

7. Openings:

- **a. Doorways and doors**: The building has a single entryway positioned at the center of its southwest façade. The entryway door appears to match the door represented in the 1940 plans (research has not resulted in location of original plans). It is a 7' x 4' sliding steel door hung on tracks installed in the top of a concrete rectangular inset. A slanted, steel drip course extends just above the concrete inset to protect the sliding door rail from moisture and debris from neighboring trees. The door slides in a southerly direction to open, and has a "#3" wood marker affixed to it, indicating the building's original function as the No. 3 Switchboard Room. The sliding door features rivets and heavy sheet-metal panels, features that fortify and lend security to the building.
- **b.** Windows and vents: The windows and basement vents are secured with vertical bars and appear to match those represented in the 1940 plans (research has not resulted in identification of the location of original plans). Windows consist of five identically sized four-light, two-over-two double-hung sashes in steel casings. Steel frames, sash, and mullions also reflect security concerns in the design. The window components are designed to look like wood millwork although they are made of steel. Each window measures 2'-10" x 5'-1", has bronze hardware (lifts and locks), and includes an internal rope and weight system in window frames to allow the lower sash to rise. Each window is covered by galvanized steel security bars consisting of eight vertical rods with three horizontal braces bolted into concrete. Broken sections of 1/4" wire-reinforced glass, which was presumably installed in all the windows at some point in time, is extant in several of the windows, although most of the glass is gone. Two of the five windows flank the entry at the building's southwest façade. The westerly of these windows is positioned several feet further from the door at the façade center than is the easterly window. The northwest and southeast walls have no windows, but do have small basement-level vents with concrete-embedded vertical bars. Asymmetrically patterned fenestration at the northeast (rear) wall reflects the

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arrangement of interior rooms, with one window opening from the building's smaller room, and two windows opening from the larger main room. A perforated, steel plate—faced vent is positioned at the lower southwest end of the building's northwest side. The larger room has an opening at the center of its ceiling with remnant metal lining of a former roof ventilator.

8. Roof:

- **a. Shape, covering**: The roof is flat and rectangular in plan, consisting of 2" x 8" ceiling joists, wood board sheathing, and built-up bitumen roofing. Wind-blown sediment and overhanging tree debris has built up on the roof. Plants are currently growing on the roof and in the gutters.
- b. Cornice, eaves: The cornice is comprised of a boxed eave overhang projecting from the roof approximately 8" beyond the wall. Yankee gutters form the ogee curve at the top of the cornice and fascia and soffit boards box the eaves. Modest decorative features, such as the cornice and the belt course running along lower exterior walls, suggest that this otherwise utilitarian structure was designed with some care for its exterior appearance. Downspouts drain the Yankee gutters at the building's west and south corners. Small, approximately 2" x 5" rectangular screens are installed in the soffits at intervals of approximately 4" to ventilate the boxed eaves and roof structure. Gutters have fallen away from the building at both the west end of its southwest façade and across its northeast (rear) wall.

C. Description of Interior:

1. Floor plans: The single-story building has a simple, rectangular floor plan with two rooms and a basement. The larger room with the entryway occupies the central and southeastern portion of the building and measures 20' x 14'-10". The smaller rectangular room at the northwest end of the building measures 14'-10" x 4'-6". The basement area is 25'-2" x 14'-10".

In the basement a monolithic concrete block is connected to an additional foundation wall situated 4'-6" southeast of the foundation wall at the building's northwest perimeter. Together, the inner wall and block stretch approximately 8' horizontally. A concrete base beam and a concrete beam extend to the southwest from the additional foundation wall section and connect to the southwest perimeter foundation wall, providing an opening into the basement area located below the smaller room at the building's northwestern end. The basement's sole interior structural wall helps support a concrete slab floor under the smaller room on the first floor and the concrete wall between the first floor rooms. The basement area under this room can also be accessed through an opening under another concrete beam extending from the additional foundation wall to the building's northeastern perimeter foundation wall. There are openings connecting the two basement rooms at each end of the concrete structural wall.

2. Flooring: The larger, main-room flooring consists of water damaged (severely in some places) painted, tongue-and-groove boards supported by diagonally placed subflooring,

and 2"x 8" joists hung between foundation lintels. A trap door leading to the basement is positioned in the larger room's southerly corner.

- 3. Wall and ceiling finish: In both rooms, the ceiling is tongue-and-groove beaded board. The building's interior poured-concrete walls have horizontal board-form imprints and 1½" thick vertical board forms remain visibly imbedded in the walls. Permanent shelving is built into the interior southwest wall of the main room. The shadow and wires of a removed 5' x 5' case—possibly the casing of the building's switchboard equipment—are visible on the southeast interior wall. Baseboard, chair-rail, and cove moldings run along the interior walls of the larger room. In the smaller, northwesterly room there are baseboard and cove moldings.
- **4. Openings**: A single doorway provides access between the smaller and larger rooms. The door frame consists of wood framing, the width of which roughly matches the room's baseboard. A single-acting, hinge-hung door opens into the larger main room from the smaller room. The single-acting wood door is made of five beveled panels positioned horizontally between two stiles and six rails. The floor hatch leading into the basement is composed of wood flooring, a recessed handle, and two hinges.
- **5. Hardware**: Building 670's hardware is utilitarian.
- **6.** Mechanical equipment:
 - **a.** Heating, air conditioning, ventilation: Wall and ceiling vents exist. However, there are no remains of heating or ventilating mechanical devices.
 - **b. Lighting**: The ceiling of the main room features six symmetrically positioned inset light boxes. The ceiling of the smaller room has three symmetrically placed inset light boxes. Push-button light switches with a mother-of-pearl "on" button and brass plates are affixed to walls in both first-floor rooms. Conduit in the basement may have led to lighting and outlets that no longer exist. In the main room, a meter and a fuse box with a wood framed, glass-pane casement door are located on the wall of the southwest side between the shelving and the sliding entryway door.
 - **c. Plumbing**: None.
 - **d.** Communications Equipment: As stated above, the shadow and wires of a removed 5' x 5' case are visible on the southeast interior wall. These features appear to be, possibly, remnants of the switchboard equipment. Additionally, multiple cables (presumably telecommunications cables) run through the building's basement. Most are hung on steel wall racks or rings attached to the concrete foundation walls. Many of these cables extend through the foundation walls in the basement. For example, at the west corner of the basement there are nine circular openings in the concrete wall situated below the vent at the bottom of the building's exterior northwest wall. A number of the cables extend through these openings. These may be cables that originally provided telecommunications links to the emplacements, fire-control station, and base-end stations to the north of the building, as well to battery commands, fire-control stations, and base-end stations located across the bay.

D. Site:

1. Historic landscape design: In addition to the dry moat dug around the building's perimeter, the structure is shielded at its northeast and northwest sides by sloping berms rising nearly as high as its roof. These berms were likely part of the building's original construction and appear to have shielded it from view and possibly from the concussion of artillery fired at the batteries several hundred feet to the north. Similar berms appear to have been built adjacent to other coastal-defense–related communications and fire-control buildings constructed at Fort Winfield Scott during the 1907–1911 wave of coastal defense development.

Raised concrete manholes with steel covers house cables of the same gauge found in Building 670's basement. Based on a 1919 map of the cable system in the vicinity of the building, these manholes allowed for maintenance of cable lines telephonically linking the switchboard room, the nearby coastal defense batteries, and both the fire-control station and base-end station (neither is extant) that transmitted target information to the artillery operators at nearby batteries. ¹⁶

Part 3. Sources of Information

- **A. Architectural Drawings**: The earliest building plans retrieved during research date to 1940: Department of Engineering, Presidio of San Francisco, Building No. 670, Fort Scott Switchboard No. 3, Traced March 15, 1940, Revised February 10, 1949, Presidio Department of Engineering Building Plans, GOGA 34300, Golden Gate NRA Archives.
- **B. Early Views**: The earliest view of the building located during research dates to the mid-1930s and pictures the building in the upper right background: Photo 30, Viaduct, High Presidio Approach, Construction Photographs of the Golden Gate Bridge, 1933–34. BANC PIC 1905.14281. The Bancroft Library, University of California, Berkeley, and On-Line Archive of California: http://www.oac.cdlib.org/ark:/13030/tf309nb3dc/?brand=oac4.

C. Bibliography:

1. Primary and unpublished sources:

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Army Engineering Department. Map of Fort Scott and Presidio of San Francisco. 1918, Surveyed 1914. Drawer 311, Folder 2. National Park Service, Golden Gate NRA Archives, San Francisco, California.

Biddle, Lieut. Col. John. Report of Completed Batteries, Etc., Defenses of San Francisco,

¹⁶ U.S. Engineer's Office, 2nd District, San Francisco, Cal., Communication Cable System, Fort Scott, Cal., April 30, 1919, Golden Gate NRA Archives, Drawer 271, Folder 1.

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Part 4. Project Information

This Historic American Buildings Survey and five others occasioned by the Doyle Drive Replacement Project follow the dictates of the Programmatic Agreement among the Federal Highway Administration, the California Department of Transportation, the San Francisco County Transportation Authority, the Presidio Trust, the National Park Service, the Department of Veterans Affairs, the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the San Francisco Recreation and Parks Department.

The Cultural Resources Studies team was jointly led by Meg Scantlebury, Senior Environmental Planner (Caltrans District 4) and Dana McGowan, Principal, Cultural Resources (ICF International).

The contract work for the project was performed by ICF International, 620 Folsom, Suite 200, San Francisco, CA 94107.

Prepared by: Tim Yates, Historian, and Edward Yarbrough, Architectural Historian

Affiliation: ICF International Date: February 7, 2011